

## **REMARKS**

This is a full and timely response to the outstanding non-final Office Action mailed August 24, 2007. Claims 1-23 remain pending in the present application. Reconsideration and allowance of the application and pending claims are respectfully requested.

### **1. Response to Objections of Drawings**

The drawings have been objected to because FIG. 1 does not have descriptive text labels. Further, formal drawings have been requested for FIGs. 1-6. In response, replacement sheets of the drawings are provided containing formal drawings and descriptive text labels. Withdrawal of the objections is respectfully requested.

### **2. Response to Rejections of Claims under 35 U.S.C. §112**

Claims 1-7 and 9 have been rejected under 35 U.S.C. §112, Second Paragraph, as allegedly being indefinite. In particular, "a single SS7 point code," as recited in claims 1 and 9, is alleged to be indefinite. In response, Applicant notes that a "point code" is a term of art for an address or identification code used to identify a node within an SS7 network. For example, paragraph 0026 of the patent application states that "each SG has its own unique SS7 point code just like any other external node that is connected to the SS7 network." In describing an embodiment of the application, paragraph 0043 states that "all SGs of the ASGA have the same point code from the perspective of the SS7 network. This is unlike the situation in the prior art (e.g., Fig. 2) wherein each SG is considered an individual node that is connected to the SS7 network and thus has its own point code to uniquely identify that SG to the SS7 network." Therefore, Applicant respectfully submits that a "point code" is definite and adequately supported by the specification. Withdrawal of the rejections is respectfully requested.

### 3. Response to Rejections of Claims under 35 U.S.C. §103

Claims 1-23 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Elliott* (U.S. Patent Publication No. 2004/0022237) in view of *Dantu* (U.S. Patent No. 7,006,433).

#### a. Claim 1

As provided in independent claim 1, Applicant claims:

An arrangement for coupling a SCP (Signaling Control Point) to signaling transfer point (STP) nodes of a SS7 network, comprising:

***an aggregated signaling gateway arrangement (ASGA) including at least a first signaling gateway and a second signaling gateway, said first signaling gateway being coupled between said SCP and a first STP node of said SS7 network, said second signaling gateway being coupled between said SCP and a second STP node of said SS7 network, said first signaling gateway and said second gateway being associated with a single SS7 point code.***

(Emphasis added).

Applicants respectfully submit that independent claim 1 is allowable for at least the reason that *Elliott* in view of *Dantu* does not disclose, teach, or suggest at least "an aggregated signaling gateway arrangement (ASGA) including at least a first signaling gateway and a second signaling gateway, said first signaling gateway being coupled between said SCP and a first STP node of said SS7 network, said second signaling gateway being coupled between said SCP and a second STP node of said SS7 network, said first signaling gateway and said second gateway being associated with a single SS7 point code," as emphasized above.

For example, *Elliott* describes a packet-switched network that communicates with PSTN. See para. 0024. "In FIG. 2A, SS7 GWs 208, 210 receive signaling messages from signaling network 114 and communicate these messages to soft switch 204. Specifically, for SS7 signaled trunks, SS7 GWs 208, 210 can receive SS7 ISUP messages and transfer them to soft switch 204. SS7 GWs 208, 210 can and receive signaling messages from soft switch 204 and send SS7 ISUP messages out to signaling network 114." Para. 0595. Accordingly, *Elliott* does not disclose that a first signaling gateway and a second signaling gateway are part of an aggregated signaling

gateway arrangement where the first signaling gateway is coupled between an SCP and an STP node and the second signaling gateway is coupled between the SCP and another STP node, and further where the first and second signaling gateways are associated with a single SS7 point code. For example, in FIG. 2A, SS7 gateway 208 is coupled between STP 250 and soft switch 204 and SS7 gateway 210 is coupled between STP 252 and soft switch 204. Accordingly, SS7 gateway 210 and SS7 208 are not disclosed to be aggregated or to share the same point code. As such, *Elliott* fails to teach or suggest at least "an aggregated signaling gateway arrangement (ASGA) including at least a first signaling gateway and a second signaling gateway, said first signaling gateway being coupled between said SCP and a first STP node of said SS7 network, said second signaling gateway being coupled between said SCP and a second STP node of said SS7 network, said first signaling gateway and said second gateway being associated with a single SS7 point code," as recited in claim 1.

Further, *Dantu* describes an approach for transporting IN/AIN signaling over an IP-based network. *Dantu* discloses that "two SG nodes may be connected over an IP network to form an SG mated pair similar to the way STPs are provisioned in traditional SS7 networks (i.e., provisioning redundant pairs for increased reliability)." Col. 8, lines 59-63. It is not disclosed that each of the mated STPs is assigned a unique point code in *Dantu*. Further, the mated pair is not disclosed to be in an aggregated signaling gateway arrangement in the manner claimed. As such, *Dantu* individually or in combination with *Elliott* fails to teach or suggest at least "an aggregated signaling gateway arrangement (ASGA) including at least a first signaling gateway and a second signaling gateway, said first signaling gateway being coupled between said SCP and a first STP node of said SS7 network, said second signaling gateway being coupled between said SCP and a second STP node of said SS7 network, said first signaling gateway and said second gateway being associated with a single SS7 point code," as recited in claim 1.

As a result, *Elliott* in view of *Dantu* fails to establish a *prima facie* case of obviousness for claim 1, and the rejection of claim 1 should be withdrawn.

**b. Claims 2-7**

Because independent claim 1 is allowable over the cited art of record, dependent claims 2-7 (which depend from independent claim 1) are allowable as a matter of law for at least the reason that dependent claims 2-7 contain all the features of independent claim 1. For at least this reason, the rejections of claims 2-7 should be withdrawn.

**c. Claim 8**

As provided in independent claim 8, Applicant claims:

A communication network, comprising:  
a SS7 network comprising a plurality of interconnected STP (Signaling Transfer Point) nodes;  
an application server; and  
***an aggregated signaling gateway arrangement (ASGA) coupled between said application server and said SS7 network, said ASGA comprising at least a first signaling gateway and a second signaling gateway, said first signaling gateway being configured to transmit and receive SS7 messages with a first STP node of said SS7 network, said second signaling gateway being configured to transmit and receive SS7 messages with a second STP node of said SS7 network, said first signaling gateway and said second signaling gateway communicating with said application server using SS7-over-IP.***

(Emphasis added).

Applicants respectfully submit that independent claim 8 is allowable for at least the reason that *Elliott* in view of *Dantu* does not disclose, teach, or suggest at least "an aggregated signaling gateway arrangement (ASGA) coupled between said application server and said SS7 network, said ASGA comprising at least a first signaling gateway and a second signaling gateway, said first signaling gateway being configured to transmit and receive SS7 messages with a first STP node of said SS7 network, said second signaling gateway being configured to transmit and receive SS7 messages with a second STP node of said SS7 network, said first signaling gateway and said second signaling gateway communicating with said application server using SS7-over-IP," as emphasized above.

For example, *Elliott* describes a packet-switched network that communicates with PSTN. See para. 0024. "In FIG. 2A, SS7 GWs 208, 210 receive signaling messages

from signaling network 114 and communicate these messages to soft switch 204. Specifically, for SS7 signaled trunks, SS7 GWs 208, 210 can receive SS7 ISUP messages and transfer them to soft switch 204. SS7 GWs 208, 210 can and receive signaling messages from soft switch 204 and send SS7 ISUP messages out to signaling network 114.” Para. 0595. Accordingly, *Elliott* does not disclose that a first signaling gateway and a second signaling gateway are part of an aggregated signaling gateway arrangement where the first signaling gateway is coupled between an SCP and an STP node and the second signaling gateway is coupled between the SCP and another STP node, and further where the first and second signaling gateways are associated with a single SS7 point code. For example, in FIG. 2A, SS7 gateway 208 is coupled between STP 250 and soft switch 204 and SS7 gateway 210 is coupled between STP 252 and soft switch 204. Accordingly, SS7 gateway 210 and SS7 208 are not disclosed to be aggregated or to share the same point code. As such, *Elliott* fails to teach or suggest at least “an aggregated signaling gateway arrangement (ASGA) coupled between said application server and said SS7 network, said ASGA comprising at least a first signaling gateway and a second signaling gateway, said first signaling gateway being configured to transmit and receive SS7 messages with a first STP node of said SS7 network, said second signaling gateway being configured to transmit and receive SS7 messages with a second STP node of said SS7 network, said first signaling gateway and said second signaling gateway communicating with said application server using SS7-over-IP,” as recited in claim 8.

Further, *Dantu* describes an approach for transporting IN/AIN signaling over an IP-based network. *Dantu* discloses that “two SG nodes may be connected over an IP network to form an SG mated pair similar to the way STPs are provisioned in traditional SS7 networks (i.e., provisioning redundant pairs for increased reliability).” Col. 8, lines 59-63. It is not disclosed that each of the mated STPs is assigned a unique point code in *Dantu*. Further, the mated pair is not disclosed to be in an aggregated signaling gateway arrangement in the manner claimed. As such, *Dantu* individually or in combination with *Elliott* fails to teach or suggest at least “an aggregated signaling gateway arrangement (ASGA) coupled between said application server and said SS7 network, said ASGA comprising at least a first signaling gateway and a second

signaling gateway, said first signaling gateway being configured to transmit and receive SS7 messages with a first STP node of said SS7 network, said second signaling gateway being configured to transmit and receive SS7 messages with a second STP node of said SS7 network, said first signaling gateway and said second signaling gateway communicating with said application server using SS7-over-IP," as recited in claim 8.

As a result, *Elliott* in view of *Dantu* fails to establish a *prima facie* case of obviousness for claim 8, and the rejection of claim 8 should be withdrawn.

**d. Claims 9-14**

Because independent claim 8 is allowable over the cited art of record, dependent claims 9-14 (which depend from independent claim 8) are allowable as a matter of law for at least the reason that dependent claims 9-14 contain all the features of independent claim 8. For at least this reason, the rejections of claims 9-14 should be withdrawn.

**e. Claim 15**

As provided in independent claim 15, Applicant claims:

A method for transmitting SS7 messages between a SCP (Signaling Control Point) and a SS7 network, said SS7 network comprising a plurality of interconnected STP (Signaling Transfer Point) nodes, comprising:

***providing an aggregated signaling gateway arrangement (ASGA), said ASGA being coupled between said SCP and said SS7 network and comprising at least a first signaling gateway and a second signaling gateway, said first signaling gateway being coupled with a first STP node of said SS7 network, said second signaling gateway being coupled with a second STP node of said SS7 network; and***

***employing SS7-over-IP to communicate between said SCP and said first signaling gateway and said second signaling gateway.***

(Emphasis added).

Applicants respectfully submit that independent claim 15 is allowable for at least the reason that *Elliott* in view of *Dantu* does not disclose, teach, or suggest at least "providing an aggregated signaling gateway arrangement (ASGA), said ASGA being

coupled between said SCP and said SS7 network and comprising at least a first signaling gateway and a second signaling gateway, said first signaling gateway being coupled with a first STP node of said SS7 network, said second signaling gateway being coupled with a second STP node of said SS7 network," as emphasized above.

For example, *Elliott* describes a packet-switched network that communicates with PSTN. See para. 0024. "In FIG. 2A, SS7 GWs 208, 210 receive signaling messages from signaling network 114 and communicate these messages to soft switch 204. Specifically, for SS7 signaled trunks, SS7 GWs 208, 210 can receive SS7 ISUP messages and transfer them to soft switch 204. SS7 GWs 208, 210 can and receive signaling messages from soft switch 204 and send SS7 ISUP messages out to signaling network 114." Para. 0595. Accordingly, *Elliott* does not disclose that a first signaling gateway and a second signaling gateway are part of an aggregated signaling gateway arrangement where the first signaling gateway is coupled between an SCP and an STP node and the second signaling gateway is coupled between the SCP and another STP node, and further where the first and second signaling gateways are associated with a single SS7 point code. For example, in FIG. 2A, SS7 gateway 208 is coupled between STP 250 and soft switch 204 and SS7 gateway 210 is coupled between STP 252 and soft switch 204. Accordingly, SS7 gateway 210 and SS7 208 are not disclosed to be aggregated or to share the same point code. As such, *Elliott* fails to teach or suggest at least "providing an aggregated signaling gateway arrangement (ASGA), said ASGA being coupled between said SCP and said SS7 network and comprising at least a first signaling gateway and a second signaling gateway, said first signaling gateway being coupled with a first STP node of said SS7 network, said second signaling gateway being coupled with a second STP node of said SS7 network," as recited in claim 15.

Further, *Dantu* describes an approach for transporting IN/AIN signaling over an IP-based network. *Dantu* discloses that "two SG nodes may be connected over an IP network to form an SG mated pair similar to the way STPs are provisioned in traditional SS7 networks (i.e., provisioning redundant pairs for increased reliability)." Col. 8, lines 59-63. It is not disclosed that each of the mated STPs is assigned a unique point code in *Dantu*. Further, the mated pair is not disclosed to be in an aggregated signaling

gateway arrangement in the manner claimed. As such, *Dantu* individually or in combination with *Elliott* fails to teach or suggest at least "providing an aggregated signaling gateway arrangement (ASGA), said ASGA being coupled between said SCP and said SS7 network and comprising at least a first signaling gateway and a second signaling gateway, said first signaling gateway being coupled with a first STP node of said SS7 network, said second signaling gateway being coupled with a second STP node of said SS7 network," as recited in claim 15.

As a result, *Elliott* in view of *Dantu* fails to establish a *prima facie* case of obviousness for claim 15, and the rejection of claim 15 should be withdrawn.

**f. Claims 16-23**

Because independent claim 15 is allowable over the cited art of record, dependent claims 16-23 (which depend from independent claim 15) are allowable as a matter of law for at least the reason that dependent claims 16-23 contain all the features of independent claim 15. For at least this reason, the rejections of claims 16-23 should be withdrawn.

**CONCLUSION**

For at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned agent at (770) 933-9500.

Respectfully submitted,

  
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